

# Notice of Allowability

Application No.

10/670,458

Examiner

Dharti H. Patel

Applicant(s)

ISHIKAWA ET AL.

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an Amendment filed on 01/23/2006.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

The following is an examiner's statement of reasons for indicating allowance of claims 1: LaVenture teaches a regulated power supply system comprising first and second constant voltage generating circuits for changing an input voltage from an external electric power source to predetermined supply voltages to be supplied to a vehicle-mounted electronic control device; and Gebara teaches an abnormal condition detector circuit for detecting an occurrence of an abnormal condition of either one of the first and second constant voltage generating circuit. However, the prior art fails to teach or suggest that the abnormal condition detector circuit is provided in common for the first and second constant voltage generating circuits to interrupt or limit the output of the supply voltage in both of the constant voltage generating circuits when the abnormal condition is detected by the abnormal condition detector circuit while maintaining the input voltage. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

The following is an examiner's statement of reasons for indicating allowance of claim 15: LaVenture teaches an electric power source device for supplying different electric power source voltage to the at least two circuits but does not teach a vehicle-mounted electronic control device having at least two circuits that receive different electric power source voltages from an external unit, and operate upon exchanging signals to each other. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

The following is an examiner's statement of reasons for indicating allowance of claim 20: LaVenture does not disclose that the abnormal condition detector circuit is

provided in common for the at least two constant voltage generating circuits to interrupt or limit the output of the supply voltage in all of the constant voltage generating circuits when the abnormal condition is detected by the abnormal condition detector circuit, wherein at least one of the constant voltage generating circuits includes a re-regulating circuit for further changing the output from the switching regulator and the protection means including the re-regulating circuit, interrupts or limits the output from the re-regulating circuit when the abnormal condition is detected by the abnormal condition detecting circuit when an over-voltage or an over-current is detected. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

The following is an examiner's statement of reasons for indicating allowance of claim 22: LaVenture does not disclose that the abnormal condition detector circuit is provided in common for the at least two constant voltage generating circuits to interrupt or limit the output of the supply voltage in all of the constant voltage generating circuits when the abnormal condition is detected by the abnormal condition detector circuit. The prior art also does not disclose that the switching regulator includes a transistor, wherein each transistor and the temperature detector means are formed in a same semiconductor integrated circuit.

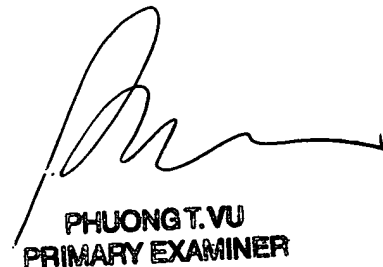
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dharti H. Patel whose telephone number is 571-272-8659. The examiner can normally be reached on 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800, Ext. 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DHP  
02/03/2006



PHUONG T. VU  
PRIMARY EXAMINER